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Summary

Digital pictures are taken by a digital camera. The digital camera provides picture data with a large dynamic range of, for example, 10 bit. Data processing and display devices operate with 8 bit only, i.e. do not take advantage of the high dynamic range of the camera. This is important in traffic monitoring installations, where, on one hand, the driver in a relatively dark passenger compartment of a vehicle and, on the other hand, the bright license plate have to be recognized to provide evidence in court. For this reason, a dark picture and a bright picture are derived from the picture data provided by the camera. This is done by reading, on one hand, the eight least significant digits and, on the other hand, the eight most significant digits of the camera output to provide the dark and bright pictures, respectively. The dark and bright pictures thus obtained are balanced against color, gray, contrast or brightness values of histograms derived from previous pictures. Then the picture data of the dark and bright pictures are mixed to provide a composed picture, in which the dark and bright pictures are superimposed. This picture permits recognition of both the driver and the license plate.